The data you have requested:

The Virginia format of the Virginia portion of the National Watershed Boundary Dataset (NWBD)

is available on the DCR ftp site as either GIS files or as maps.

To retrieve:

IF you have installed Internet Explorer 8, you may need to first do the following:

- 1> Start Internet Explorer 8
- 2> Click on "Tools", then click on "Internet Options"
- 3> Click on the "Advanced" tab
- 4> Under "Browsing", select (check) the "Enable FTP folder view (outside of Internet Explorer" option
- 5> Click "OK"

Copy and paste the following:

ftp://ftp.dcr.virginia.gov/NWBD

into the address field of Windows Explorer (this will not work in Internet Explorer)

In the "Log On As" box, enter:

username: guest

password: c0nserv (that is a zero in c0nserv, no ending 'e')

Then hit the "Log On" button.

To then retrieve the PDF maps enter directory NWBDMaps.

The files in this directory are PDFs of maps by jurisdiction that show the 6th order NWBD units (boundaries and VA codes) over 1/100,000 scale topo DRGs. Jurisdiction names are in the file names. Some jurisdictions have been combined in a single map, so if you do not see the county or city you are looking for consult the WORD document maplookup.doc, which is in this directory. Those maps that were altered in the creation of version 2 of the VA NWBD (May 2007) have a "v2" in their filename. Those maps that were altered in the creation of version 3 of the VA NWBD (Oct 2008) have a "v3" in their filename.

These maps are made to be large so that they do not degrade upon normal zooming. Thus they are large files. Therefore ****DO NOT***** click on any of them in an attempt to view the maps prior to downloading them as they will take a long time to display. Choose them selectively, and only open those you have downloaded. Make multiple selections using the CTRL key.

From File choose "Copy to Folder"

browse to where you want the files to go on your computer $\ensuremath{\text{OK}}\xspace$.

To retrieve the GIS files instead, enter directory VA.

The hydrologic unit boundaries in this directory are the sixth order hydrologic units (12 digits – i.e. 020700040101) of version 4 of the NWBD for Virginia. As of 16 Sept 2009 only version 4 is available. This official Virginia version of the NWBD comes in two forms:

Cover Form

vanwbd_v4.e00.Z - arc export file of the coverage, compressed with the unix

```
compress command (Lempel-Ziv). This file can be uncompressed either on another UNIX system, in Windows XP or VISTA, or by using the WinZip program.
```

- $\label{eq:master12_v4.tab.e00} \mbox{- arc export file of the master sixth order unit INFO table.} \\ \mbox{Relates to the cover on VAHU6.}$
- $main_v4.tab.e00$ arc export file of the INFO table which describes the extent of each sixth order unit on the main hydrographic feature.

- hunwbd_v2.tab.e00 arc export file of the INFO table which relates each of the previous 14-digit hydrologic units to their extent in terms of the sixth order units of the VA NWBD. Only of importance to those who previously used the 14-digit system.
- nwbdhu_v3.tab.e00 arc export file of the INFO table which relates each sixth order unit of the VA NWBD to their extent in terms of the previous 14-digit hydrologic units. Only of importance to those who previously used the 14digit system.

Shapefile Form

```
vanwbdshape_v4.zip - XP compressed folder of shapefile components:
```

vanwbdp_v4.shp - polygon coordinates.

vanwbdp_v4.shx - polygon coordinate index.

vanwbdp_v4.dbf - database file of basic polygon attributes.

vanwbdp_v4.prj - polygon projection file.

vanwbda_v4.shp - arc coordinates.

vanwbda_v4.shx - arc coordinate index.

vanwbda_v4.dbf - database file of all arc attributes.

vanwbda_v4.prj - arc projection file.

master10_v4.dbf - database file of fifth order unit attributes; relates to vanwbdp_v4.dbf on VAHU5.

 $master12_v4.dbf$ - database file of sixth order unit attributes; relates to $vanwbdp_v4.dbf$ on VAHU6.

main_v4.dbf - see main_v4.tab.e00 above.

lname5_v4.txt - see lname5_v4.txt above.

lname6_v4.txt - see lname6_v4.txt above.

hunwbd_v2.dbf - see hunwbd_v2.tab.e00 above.

nwbdhu_v3.dbf - see nwbdhu_v3.tab.e00 above.

The fifth order unit layer can be constructed from the above sixth order unit layer - it is not a separate retrievable product.

Choose the files for either the cover or the shapefile, making multiple selections using CTRL key. You will have to select all files listed in the cover form above to get the complete cover data. If choosing to retrieve the shapefile form instead you just need to select the .zip file.

From File choose "Copy to Folder"

browse to where you want the files to go on your computer $\ensuremath{\text{OK}}\xspace.$